# SCIENCE FOR THE PEOPLE.

COMETS AND SHOOTING STARS. COMETS AND SHOOTING STARS.

Professor Schiaperelli, the well-known Italian astronomer, in a recent lecture on the great comet of 1882 explained concisely the development of these erratic bodies on their approach to the sun. The proper nucleus of a comet is, he says, a solid or liquid body so small as rarely to be seen: in the greater number of comets it seems to be not large enough to be visible even in powerful telescopes. It seems also that in some comets there are several nuclei, very small and close, whose copes. It seems also that in some comets there are several nuclei, very small and close, whose particular atmospheres in their development at last unite in one. So long as such a body, or system of bodies, remains far from the sun, in extra-planetary regions, where temperature is less than -140° C. (according to the most moderate estimates), and where the sun has perhaps no power to heat it, the matter must be wholly solid, or at least liquid; and if a small quantity is gaseous or vaporous, it must have a great density and a small volume. The approach to the sun will obviously swell the cartelonian attentions. proach to the sun will obviously swell the enveloping atmosphere, or give rise to one if it does not yet exist. Shortly the nucleus begins to appear surrounded by a blaze of light, feeble at first, but afterward more and more brilliant, which is the star or head of the comet. Many comets do not go beyond this first phase, both because they have not matter enough to make an atmosphere, and because they do not come near enough to the sun to be subject to a great heat. Some comets do not enter the earth's orbit, others cannot reach that of Mars, and the heat. Some comets do not enter the earth's orbit, others cannot reach that of Mars, and the comet of 1729 got only a little way into the orbit of Jupiter. The most part of those comets, being exposed very moderately to the solar influence, cannot increase, and remain telescopic; and it is probable that a large number stop at Jupiter or Saturn's orbit (or even further) in their descent upon the sun: none of those are seen.

The tail of a comet consists of matters repelled by the sun with a mysterious power.
The comet is also so much swollen and convulsed by solar heat that the little nucleus is
not able sometimes to keep together the fragments by its own very feeble attraction. Violent cruptions take place at the surface, so that
pieces of the nucleus are raised and thrown
out of the principal body's attraction. Those
fragments then pass through the heavens as tail of a comet consists of matters reout of the principal body's attraction. Those fragments then pass through the heavens as independent bodies, and their orbits are not very different from the orbit of the nucleus. Sometimes one of the broken pieces is large enough to engender another separate comet. But most generally it seems that separated pieces are small and numerous, like the sparks of a piece of salt thrown on the fire; and ex-tend along the trajectory of the nucleus like a current or projection of corpuscles, which grad-nally invade all the orbit of the comet. Many comets (probably all) engender in their course a similar retinue; and the planetary intervals are peopled by these corpuscles produced by a comet's partial disintegration. When the earth in its yearly revolution passes through one of these processions it meets with several pieces, which get inflamed by contact with the terrestrial atmosphere, and burn in a short time, pro-ducing a falling star.

those are seen.

HOW TO TAKE EXERCISE.

The aim of exercise, says The London Lancet, is not solely to work the organism which is thrown into activity, though that is one, and a very important, part of the object in view, because as the living body works it feeds, and as it feeds it is replenished; but there is another purpose in exercise, and that is to call into action and stimulate the faculty of recuperation. The difference between being accustomed to exercise and able to work "without feeling it," and being barely able to accomplish a special and being barely able to accomplish a special task, and having it "taken out" of one bythe extask, and having it "taken out" of one byttle exploit, whether mental or physical, is the difference between possessing the power of rapid repair by nutrition, and not having that power
in working order—so that some time must
elapse before recovery takes place, and during
the interval there will be "fatigue" and more
or less exhaustion. Exercise with a view to reor less exhaustion. Exercise with a view to re-cuperation should never so much exceed the capacity of the recuperative faculty as to proscapacity of the recuperative incurry as to pro-trate the nervous energy. The work done ought not to produce any great sense of fatigue. If "exhaustion" be experienced, the exercise has been excessive in amount. The best plan to pursue is to begin with a very moderate amount of work, continued during a ought not to fatigue. If "or moderate amount of work, continued during a brief period, and to make the length of the interval between the cessation of the exercise and the recovery of a feeling of "freshness" the guide as to the increase of exercise. We do not mean that false sense of revival which is sometimes derived from the recourse to stimulants, but genuine recovery after a brief period of rest and the use of plain nutritious food. If this simple rule were carried into practice by those who desire "to grow strong," there would be less disappointment, and a generally better received than eften attends the endeavor to result, than often attends the endeavor to profit by exercise unintelligently employed.

### A CHEESE-MAKING BERRY.

Nature has, it appears, provided a substitute for rennet in the manufacture of cheese, the article being the berry of the plant known to botanists as Withania coagulans. This shrub, says The London Globe, thrives in the Punjab and Trans-Indus territory, and has long been used by the Bellochees and Afghans to curdle milk Rut its complete efficacy was not de monstrated until lately, when the berry was offi-cially experimented with at a farm belonging to Sir James Ferguson, the present Governor of Bombay. The report published by the Government says that a complete success was achieved, a perfect curd being produced and the cheese turning out excellent in every respect. The method of preparing the punera—so is the berry called, from the Persian name of cheese is to put some ounces into a small quantity of cold water, and to allow this to summer by the side of a fire for twelve hours. At the end of that time about half a pint of the decoction will suffice to curdle fifty-five gallons of milk, the quantity of berries employed being two ounces. With a view to the more extended cultivation of the shrub, an experimental plau-tation is about to be established at the Govern-ment Botanical Gardens at Saharanpore.

CONCENTRATION OF SOLAR HEAT. Delaurier describes in Les Mondes a ne system of concentration of solar heat. The principle is that if the air be heated in a closed space, the hottest layers rise to the upper parts, and in this region the temperature will rise more and more if the calorific action be pro-onged, and suitable precautions be taken against cooling. Thus, if the inclosure have he form of a pyramid cr a cone, an apparatus, both curiously and variously useful, may be had at little cost. M. Delaurier uses a double had at little cost. M. Delaurier uses a double envelope of glass with a layer of air in the interval. On the shaded side the outer envelope is covered with light wooden shutters coated with bright metal. This arrangement is especially useful for winter or a cold chimate. At the centre of the apparatus, on a wooden base, as fixed carried radiating partitions of goods. are fixed vertical radiating partitions of conper blackened by oxidation, and on the edges of these are cemented the trapezoidal plates of glass, which form the first envelope. The ap-paratus is not harmetically closed below. M. Delaurier considers that it would, besides being industrially useful, make an excellent pyrrhe

PHOTOGRAPHING THE VOCAL ORGANS. Some attempts have been made in London to photograph the human vocal organs in the act of singing. The principal object was to obtain a picture of the ligaments known as the vocal chords, which are situated at the top of the larynx. These can be viewed in the laryngo-scope, a small mirror, which when placed at the back of the throat serves at once to reflect light upon the membranes, and to form an image of them visible to the observer. With the aid of this instrument numerous observations have this instrument numerous observations have been made upon singers, and much valuable information has been collected, but all previous efforts to obtain a photograph by substituting a camern for the observer's eye have entirely failed. The difficulties were overcome by the use of a powerful Siemens electric lamp, supplied by a dynamo machine. By means of this light some excellent photographs were obtained of the laryngoscopic image. The patient tained of the laryngoscopic image. The patient in each case was Herr Behnke, at whose instance the experiments were made.

Medicated garments are common enough, and Dr. Claudat, a Frenchman, has just added to them a so-called "electric flannel," which he claims is efficacious against rheumatism. This flannel contains, per kilogramme of wool, 115 Hammes of oxides of tin, copper, zinc and iron, ascries of threads of the tissue saturated with head metallia, products are worse alternately.

with the ordinary threads. The flannel so prewith the ordinary threads. The flannel so pre-pared forms a dry pile. M. Drincourt, pro-fessor of physics at the Rheims Lyceum, and M. Portevin, of the polytechnic school, have proved, independently, it is stated, by precise experiments, that M. Claudat's flannel liber-ates electricity, either by simple contact or (better) in contact with the products of trans-piration when the tissue is applied to the body.

## RELIGIOUS INTELLIGENCE

THE REVISED BIBLE .- The Independent is THE REVISED BIBLE.—The Independent is strongly in favor of using the revised version of the Bible in church, and puts the matter in this way: "The proper question should be whether a minister has a right to use any other than the Revised Version of the New Testament. We hold that he has not. We hold that it is wrong to use the common version, when the revised version can be had for 15 cents. It the revised version can be had for 13 cents. It is a question simply of loyalty and reverence for God's inspired Word. Here are two accessible versions, one made from a comparatively imperfect text by the inexact scholarship of over two centuries ago; the other made from a compally studied toxt by the inexact. over two centuries ago; the other made from a carefully studied text, by the much nicer scholarship of to-day, and by a more imposing body of scholars. Which version best represents the inspired original is not a question in dispute. It is agreed, by all whose opinion is worth considering, that, barring some points of mere English style, the new version is a very great advance on the old. That being the case, one who uses in worship the old does, to the extent of the differences between the two, disguise and of the differences between the two, disguise and conceal the Bible from his congregation. He reads what is not God's Word when he can read what is His Word. He reads in many passages wrong sense or nonsense, in place of good sense. He does this because he gives King James's revisers the reverence which belongs only to the Holy Spirit."

One Sermon each Sunday.—The Moravian thinks that one sermon each Sunday is enough for both preacher and people. "A few years ago," it says, "it seemed as if the whole Christian and the sermon sermon services in the services are also services as a service services are services as a service service services are services." tian Church were ready to adopt the old Mora-vian custom of having one 'preaching-service' vian custom of having one 'preaching-service' every Sunday, thus giving its ministers and congregations a little more opportunity for united worship, instead of as now devoting the whole day to instruction and exhortation. But so little has of late been heard of this reform that we conclude it has failed. It is a great pity. But we believe it will yet have to be brought about. The circumstances of the times are ever more and more demanding thoughtful and thorough sermons. The problems to be grappled with are becoming more and more profound and intricate, and the audiences more intelligent. And so long as the preacher has to pregate two discourses every week he cannot come up to the standard required. We must either have one good sermon, or two inferior ones.

Too MUCH ZEAL .- The Christian Intelli-Too Much Zeal.—The Christian Intelligencer tells this story to show that there is such a thing as too much zeal. A young man entered a stage in New-York, who was full of Christian zeal. An elderly gentleman sat reading a Bible. "This is a chance to scatter seed," thought young Timothy. The old gentleman alighted; so did he. Starting down a street he overtook him, and with undisguised solicitude he asked him, "Understandest thou what thou readest?" He understood it all, and looking down moon his questioner with a fatherly smile readest?" He understood it all, and looking down upon his questioner with a fatherly smile he answered, as he patted him on the shoulder, "Young man, I have been preaching this Gospel over thirty years; but you meant well, my friend, you meant well." The young man lost no time in turning the first corner, and realizing that he needed a little more "serpent" to hear his "dova" company. keep his "dove" company.

NEGROES IN THE SOUTH .- At a meeting of the Episcopal Church Congress a few months ago, one of the speakers, the Rev. J. L. Tucker, of Jackson, Miss., created a sensation by saying that the moral and spiritual condition of the negro race in the South is deplorable, and that even their religion is "unconscious hypocthat even their religion is "unconscious hyporisy." He has since written a book entitled "The Relations of the Church to the Colored Race," in which he reiterates his statements and adduces facts to prove them.

A ZEALOUS WARDEN.—At a "low celebra-tion" at St. Matthew's Church, Sheffield, not long ago, one of the church wardens rushed within the chancel rails and seized a bottle of

It was on the 15th of April, 1764, that the Rev. Archibald Laidlie preached the first English sermon in the Reformed Dutch Church of this city. Last Sunday was the 119th anni-

versary of this interesting event. Recently the church of the colored people in Austin, Ark., was partially submerged by the flood. When Sunday came the pastor climbed

to the roof and preached a sermon to his people, who attended in skiffs. It is said that the Earl of Mulgrave will probably be appointed vicar of St. Peter's Church, Eaton-square, London, made vacant by the appointment of Canon G. H. Wilkinson to the Bishopric of Truro.

On the fence of an old graveyard in Pennsy!vania appears the following inscription in large white letters: "Use Smith's bottled ale if

you would keep out of here." Moody and Sankey have been holding very successful revival services in Leeds and Liverpool, England.

It is said that fully one-third of the Roman Catholics of St. Louis are believers in Spiritualism.

Manchester Cathedral, England, is to be re-

stored at a cost of \$150,000. CURRENT RELIGIOUS OPINION.

That wonderful creature, the Reporter, has lately discovered a new vein which promises to be richly worked. It is the publishing a list of those who have been confirmed. A paper came out the other day with the following item: "The Bishop of Biank confirmed yesterday morning at St. Perfection's Church, Sallie Waters, Tommy Jones, Birdie Brown, etc., etc." We wonder how the list was procured, for certainly the elergyman would not have given it. Is this to go on and be developed? Are we even to have such items as this: "Pussie Williams and Ernest Maltravers were present at the early celebration yesterday in St. Agnes's Church. Polly Watkins, on account of her sudden cold, was unable to attend"; or, "We noticed with pleasure that Colonel and Mrs. Heavypurse honored St. Simon's Church with noticed with pleasure that Colonel and Mrs. Heavypurse honored St. Simon's Church with their presence on Sunday last." Oh, spare us this at least, argus-cycd ones! Let the penitent and earnest souls come to their confirmation and take up their Christian vows without having their names printed in the next morning's edition of The Family Spy. May we ask any clergyman when importuned for the list, to say no!! It is hard, however, to imagine any rector giving such a list, but there are rectors and rectors.—[Living Church.

In great cities it is now very rare to have a general revival pervading the churches of all denominations. There is nothing in the nature of the case to make them impossible, but there is much to cause them to be more improbable. There are men now living who have seen this city shaken as by a mighty wind under the power of the spirit of a revival of religion. But the city was then far from being what it now is. The population has greatly changed. The business of the city has become widely different. The domestic life of employer and employed is not what it was. Society itself is constituted on other principles. The chief peculiarity is that with the growth of business, wealth and subdivision of labor, the association of families has been broken up, and individuality is asserted mere and more. Society is not now constructed on the social principle, but is regulated by conventional rules. This disturbance of the close intimacies of life has led to less interest in a neighbor's spiritual welfare, and the Church itself takes on the phase that distinguishes the world.—[New-York Observer, In great cities it is now very rare to have a gen

The material out of which the "average" mineach case was Herr Behnke, at whose inmore the experiments were made.

ELECTRIC FLANNEL.

Medicated garments are common enough, and
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oma so-called "electric flannel," which he
tans is efficacious against rheumatism. This
made is a young man, with such an amount
of personal religion as the average church member
possesses. He desires to de good, thinks the ministry opens the way to usefulness, and perhaps believes he is specially "called" to it. He studies
in college and seminary, becomes engaged to a young
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MY LADY.

- From The Home Journal. I think of her in April days,
- So gladsome is she,
  So rich in beauty, shyly hid,
  So winning and free;
  So proud thro' transitory tears,
  Yet not else than kind;
  So pure, her like in all the world
  I never shall find!
- I dream of her by leafy glades
- Mere brooks ripple calm;
  I sing to her within my heart
  A merry spring psalm;
  For sweeter are than western winds
  Her swift, low replies,
  And more to me than violets
  Those frank English eyes.
  LOUISE IMOGENE GUINEY.

#### A NIGHT OF ADVENTURE

It was a hot, weary morning at the far end of the London season. There were not very many carriages left in the Park or the streets; yet. Zee Connigton, one of the greatest beauties in society, was driving down dusty Oxford-st. And she was crying, quietly, beneath the parasol, which she held well over her eyes. Presently the carriage turned up one of the substantial side streets, and stopped in front of a very neat and prosperous-looking house. The door was painted a dark green, and on it was a brass plate, bearing this inscription: 'Mr. Edgar's Home for Trained Nurses,' Mrs. Conington quietly left her carriage, rang the bell at the noor, and was immediately admitted. She was shown into the 'office,' where she found Mr. Edgar and his Lady Superintendent, both apparently very busy at large writing-tables.

'I want a nurse, Mr. Edgar,' sald Zoe Conington rather helplessly. She knew her eyes were red, and she did not like the feeling.

'Certainly, said Mr. Edgar; 'what sort of case?' It is for my susfer, said Zoe. 'I really don't understand what's the matter. They say she has what they call animia, and the doctor who attends her fears she will not live long. I believe he is an oid foggy, and does not understand the case.'

Then you want a nurse of experience?' said Mr. Edgar.

'Exactly,' said Zoe eagerly; 'and I should be so It was a hot, weary morning at the far end of the

Then you want a nurse of experience? said Mr. Edgar.

'Exactly,' said Zee eagerly; 'and I should be so glad if I could have one that is lauylike as well—not a common hospital nurse. You see my sister is quite alone, without any lady friend; and I can't go to her because her busband doesn't like me'.

'Nurse Harcourt,' said Mr. Edgar to the Lady Superintendent who nedded and rang a bell. 'She is exactly what you want,' he added, turning to Zoe. 'She is an experienced and clever nurse, and she is a lady. We don't have many like her. She belongs to a good family. I feel sure you will like her. Come in. Miss Harcourt,' as the nurse thus named entered. 'This lady wants you to go to her sister.'

sister. . What is the case, sir? said Nurse Harcourt.

'What is the case, say the work of the said to be amenia.

I can undertake that, I think, sir.'
Of course you can, but in the Lady Superintendent.
Zoe had quickly taken in the pirl's appearance. cut.

Zoe had quickly taken in the rirl's appearance. She was slender, active, with an intelligent and interesting face. Her features were not good, yet there was a charm of color about her. She had large and very dark eyes, and strong dark eyes intows; while her thick hair, cut quits short, was all bright with warm gold and red. This certainty was not Zoe's idea of a 'common hospital nurse.' I don't know whether I ought to say so, said she to the nurse, 'but I don't think the doctor understands the case. Have you often nursed amemia? Yes, in the hospital, said Nurse Harcourt; and I have had case since in which it was present. I don't think I should be easily deceived in it.'

'Then you must have my address, said Zoe; 'and write or telegraph to me direct, as you think fit. If there is any mistake being made in the treatment, I will send down a physician at once. Will you uncertake this?'

"Yes," said Nurse Harcourt with a quick, bright smile; 'I think I can undertake that. Shall I get ready, sir?

"What station!' asked Mr. Edgar, armed with

"What station?" asked Mr. Edgar, armed with

ready, sir?

What station? asked Mr. Edgar, armed with an 'A. B. C. and a magnificent glass.

Lostayvil. said Zoe, somewhere near l'enzance —a wretened little river fishing-place. l'eooie ought not to go so far away from every-edy. Is there any charce of her getting there los-light?

'Lostayvil-oh, ves; she cat, get there at 10. The train starts in half an hour. She must have some sandwiches made up to take with her,' he said to the Lady Superniendent, who rose and hurried away, pen in hand, to give orders.

Mrs. Conington diove to a telegraph office, and sont a 'wire' to her brother-in-law; From Zoe Conington, Hyde Fark Gate, to Edward Mertoun, The Old Hall, Lostayvil. Your account of Ayatha has alarmed me exceedingly. I am sending her a narse, as I think it may be a comfort. She will arrive at the Lostayvil Station about 10. If you cannot send for her, she will find some conveyance.' Nurse Harcourt, dressed ali in gray, and with a gray veil over her tright hair and elever face, caught the express and took her seaf without any fins of excitement, although suc had only half an hour to get ready and reach the station in. When she arrived at Lostayvil it was a clear, sweet hight; the station seemed to stand alone on a fragrant and indistinct desert, with no sign of any houses near. 'Is there anything come to fetch me from the Old Hall I asken she, in her clear, determined young voice.

'Nothing at all, miss,' said the solitary porter:

Nothing at all, miss, said the solitary porter And then, after a second's pause during which he shouldered her box, 'so'l suppose ye'll go to the

No. indeed, said Ada, who immediately suspected him of being in the pay of that same hotel.

'I must go to the Old Hall to-night. I suppose I can get something to drive in?

'There's post-horses at the hotel,' said the porter delicated.

dubiously.

Take me there, then, said Ada, It seemed to her that she walked about a mile and a half after him over a lonely road. At last they arrived at an inn entrance round which there were some signs of sleepy vilage life. After a stern interview with the duil landard, Ada succeeded in neiting him to have out a 'po'shay' and two horses for her Adarier was extracted from the bar where he was drinking; he came out surly, and, getting on the box after Ada and her luggage had been waiting some time in the 'shay,' began to want the horses. This amusement he continued to indulgs in until they arrived at the 'Old Half,' taking the horses, at a rapid gallop, up hill and down dale.

The Old Half stood high, with a wide lawn about it, dotted by clumps of ine trees. On the way Ada was charmed by glumpses of the winding silver stream and the wooded hills about it. All was very lovely; yet something in the aspect of the Old Half made her shiver as she approached it. It was very dark: only one window seemed dmily lit; the front door appeared to be hermetically scaled. But Ada courageously rang and knocked and while she waited for an answer, filled up the time by paying her surly driver the Tabulous sum he demanded of her. At last the door moved; it opened slowly, and on the steps stood a tall man.

'Are you the intries" he said.
'Yes,' answered Ada.
'I didn't suppose you could get here to-night. Well, come in.

The coachman whipped up his horses in the familiar style and rathed away. A servant who looked in Take me there, then, said Ada, It seemed to

The coachman whipped up his horses in the famillar style and rattied away. A servant who looked like a groom came out and lifted Ada's box into the hall. A lamp stood on a table there, and by its light Ada tried to discover what sort of house sie was in. She was standing in a big, old fashioned hall or house-place. Opposite her, his hands deeply buried in his pocket, stood the man who was evi-

dently master.
'I told the maid to get a room ready for you,' he said. 'The man shall light you up there, and you can see my wife in the morning. Shall he bring

you some support If you please, said Ada. 'First I'll take off my hat, and if you will allow me I'll go to my patient at once.'
'Nonsense!' said Mr. Mertoun; 'you must sleep after a journey.'
But it is my duty to see her first, if you please,

Ada followed the man servant upstairs to a little hedroom where he left her, saying he would bring her some supper. She washed her hands and combed out her bright hair. When he came back she said: 'Shall I find Mr. Mertoun downstairs?'
'He's gone to his own room,' said the groom; 'and he says missus is asleep, and not to be disturbed.' turbed.' Which is her room?' asked Ads. 'I must know.

because I've come down to nurse her.'
'I'll show you the door,' said the man. He led her a little way along a corndor, and nointed up a short staircase. 'The door on the left,' he said, and immediately hurried off, carrying his light with

short startcase. The door of the test, he said, and immediately hurried off, carrying his light with him.

This is a queer house,' thought Ada. However, she found her way back to her own room by the glimmer of light from its doorway. Then, taking her candle, she went straight to the door or the room the man had shown her. She knocked gently; there was so answer. So she quietly turned the handle and looked in. A solitary candle lit a large room: she could but dimly perceive that on the bed lay a woman who, seeing her, started up as if in terror, and then fell helplessly back again. Evidently this was the suck-room. Ada shut the door, put down her candle, and approached the bed. 'Don't be frightened,' she said; I am a nurse your sister has sent down to take care of you.' I thought you were a spirit, said Agatha Mertoun; 'I have had strange visions to-day.' Then she relapsed into a silence, and seemed to forget Ada's presence. After awhile she spoke again. 'I am dying,' she said.

Ada went close to her and looked into her eyes. They were very strange. Suddenly the unhappy woman was seized with a violent sickness. Ada, with her quick wits, noticed some things which made her wonder. When her patient, weary and exhausted, lay back again on her pillow, she began to make a tour of the room. There were a great many bottles in different places. She took out all the corks and smelled at the contents. Suddenly, while thus engaged, she happened to look toward the bed, and met Agatha's eyes fixed on her with a gaze full of some extraordinary meaning or intelligence. It almost frightened even the brave Ada. She put down the bettle quickly and went to the bedside. But Agatha had closed her eyes, as if too weak to keep them open. Looking carnestly at

her. Nurse Harcourt realized how wonderfully lovely she was, in spite of the deadly pallor which lay on her face. Sundenly the sickness came again; and then a violent spasm.

"This is a queer sort of anæmia," said Ada to herself; and, after a long look at her patient, began to smell at the physic bottles. Just then she heard a faint sound at the door Hastily approaching it, and opening it, she saw Mr. Mertoun disappearing through the opposite door. "He wanted to watch me," she thought. "Now, what can this mean?" She locked the door inside, and continued her investigations. Suddenly she came upon a bottle inside a cupboard, nearly empty, the smell from which almost made her ery out. But she remembered her patient and refraized. She merely put the bottle into her pocket, and then, without hunting about any more, went back to watch poor Agatha. The color of her face grew steadily worse, and her weakness was rapidly increasing.

"What on earth am I to do?" exclaimed Nurse Harcourt at last, "in this out-of-the-way place? I can't see her die before my eyes. If I could only got the doctor!"

She ha's spoken out loud, thinking Agatha quite anconscious. But she was not. She opened her

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"It's the only thing to be done, I believe," said Ada to herself; "and I'll do it." She took out her watch and looked at it—half-past three, Going to the window, she drew the certain a little saide. There was a taint gray haze all over the world; but the light would be enough to find one's way by and every moment brought the dawn nearer. "If I did but know the way," she thought. "Well, I must wake up some one and ask it."

Having made up her mind, she no longer hesitated. She took a final survey of her patient and then left the room. She locked the door on the outside, and took the key with her. Quokly entering her own room, she caught up her gray cloak and travelling hat, and put them on as she hurried down stairs. "If I only knew where the servants sleep!" she thought; "but I'm so afraid of rousing Mr. Mertoun. I'll wake up some cottage people."

With some considerable difficulty she opened the front door, and then drew it close behind her without absolutely shutting it. To her delight she offer it would stay so without moving; this would enable her to enter the house again quietly. As quickly as swift feet would carry her she lundrid out of the grounds. She saw no cottages; so she went on along the widest road, hoping to reach some habitation in time. To her delight she saw at last a hedger and ditcher trudging away to his work. She ran after him and, almost breathless with her quick movement and excitement, caught him by the arm while she asked him her question.

"The doctor "The replied, "Right on till the cross reads, then to the right; not moren a mile."

Not more than a mile! Nurse Barcount started off on her way plecially. That som would be accomplished she thought. Had she but known how strange is the Cornish mind on the subject of distances she might have stayed to ask further information. But, instead, sh

Her earnest tone seemed to rouse him and make this way."

Her entriest tone seemed to rouse him and make him understand that she was out on business.

"Dr. Frere is the nearest resident doctor," he said," and he lives about aix miles oil, over there," pointing the way Ada had come. "But if there's anything I can do, let me help you. I am a doctor," "You?" said Ada, her gaze wandering from his sunburned-face, which had on it the unmistakable up-all-night expression, to his white flannel-claid figure, and then to the cottage beyond, which looked so absurd, in the growing daylight, with a quantity of dying candles burning on the tables.

"It's all right," he said, seeming to understand her perolectry. "Pin Alan Browne, of Wimpole-st, I'n down her for the boating, and I've been having a bachelor party. Dain't you hear that fellow laughing as he went of just now? I had to get four of the others to take him away.

"I know your name," said Ada caruestly. "Come with me. I am a nurse from Mr. Edgar's Home. I'm in charge of Mrs. Mertoun up at the Hall, and she's dying. If you don't come at once it may be too late."

What's the matter with her?" said Dr. Browne. What's the matter with her?" said Dr. Browne.
"I've got a pocket medicine case here; shall I bring it ?"

Nurse Harcourt leaned on the gate and said something in a scarcely and the bottle from her pocket, and held it up for his in

spection. "Impossible!" he exclaimed.

spection.

"Impossible." he exclaimed.

"Come and save her," said Ada, solemnly. Dr. Browne termed, hurried into the cottage, and in little more than a minute reappeared with a small case in his hand. Seeing him ready to follow her, Ada immediately started off as quickly as possible on her return road. Alan Browne hurried after her, leaving the little cottage, with all its windows open and its candles burning to show its disorder to any passer-by who might chance to wander that way.

"You are a very good walker," said Dr. Browne, when he had got up with her.

"I believe I am," said Ada, and went quickly on without any further remark.

These two, going swiftly through the pale, ghost-like merning mist, would have looked strange to any ore who could have seen them. Both were very paie: Dr. Browne had got rather bored by his bachelor party, which had lasted too late for his tasts; and then ha had been somewhat startled by Ada and what she had said. Narse Harcourt was white with excitement and fatigue, although she did not know it, nor knew that she was weary. She was intent upon recurning to her charge; she was full of anxiety as to what haight have happened in her absence.

"You know," said Dr. Browne presently, "this in her absence. "You know," said Dr. Browne presently, "this

thing can't be possible. She is a noted beauty: the men that stay in Lostavyil go to church to look at her. Who could do such a thing !"

"I can't say sir," said Ada; "but I do not think I committed an "

"I can't say sir, said rous, am mistaken."

Dr. Browne was so be wildered by the unwonted manner of her introd—tion to him that he forgot this vision of the morning was a nurse; but Ads remembered her position, and addressed him with the manner she used in sick rooms—quiet, but having in it an odd mixture of defance and deference.

Very little more passed between them; they walked so quickly that it was not easy to talk. Dr. Browne covertiy observed his companion very carnestly.

walked so quickly that it was not easy to talk. Dr. Browne covertly observed his companion very earnestly.

As they reached the gates of the Hall the stable clock struck five, and the gray mist was beginning to lift a little and glide away like the shost of the dawn. It had been a strange wark, though neither thought of it at the time; but it had the effect of making them feel as if they had known each other for years. The house was not awake yet; all was just as Ash had left it. She gently pushed open the front door and led the way into the dark interior. Up the dark staircase the two crept, like theves. The blinds were all closed, and only a faint glimmer of light came in through the chinks here and there. As the gray figure and the white figure came noiselestly up the staircase, suddenly something started from the door of Mrs. Mertonn's room, and, with a horrible cry, rushed across the landing. It was the cry of a most awful lear. It made Ada feel sick, and she longed to sit down on the stairs, for her legs gave way beneath her. But she would not. She remembered her patient, and, getting out the key of the room, opened the door and let Dr. Browne in; then she closed it behind them, and locked it. Agatha Mertonn lay rigid, like a lovely status, on the bell. Her eyes were staring and fixed, and on her lips was a foam. Narse Harcourt looked at her with a sinking heart—was it too late? But she quickly threw saide her cloak, and prepared to wait upon Dr. Browne, who soon became absorbed in his task. He used strong measures, and watched their effect with anxiety. Narse Harcourt saw, with a currous sort or satisfaction, that he was acting upon the same idea with regard to the case which she had offered him. He did not reject it as impossible now. For two hours this lixed attention continued; neither left the bedside. At last, Dr. Browne went to the window, and beckoned Ada to him. beckoned Ada to him.

"The servants will be up now," he said; "ask them to get you some coffee. You look perfectly

them to get you some coffee. You look perfectly worn out."

"I believe I am rather tired," she said; "but I was right, wasn't I ?"

Quite right, he said; 'and you have saved her life by your pluck."

Thus comforted, Ada wont away in search of the servants. On the landing outside the door she found the manservant whom she had seen the night before. He was standing still, with a face full of perplexity.

'Nurse,' he said, 'I believe master's gone out of his mind. He has been queer for some time past, but not like this.'

'What is it,' asked Ada.

"He is sitting on his bed laughing; and then every now and then he stops, and shricks out suddenly that the house is full of gray and white ghosts. I don't like it—it's awfui!

Then Ada remembered that cry of fear. 'He must have seen me bring in Dr. Browne early this morning,' she said; he is in his boating flauncis.

Mrs. Mertoun was much worse in the night and I went for a doctor. Dr. Browne had better see your

master."

The man looked a good deal bewildered, but recovered himself sufficiently to agree, and Dr. Browne heard his tale. While the servant was gone he turned to Ada and began—'You know the house he turned to Ada and began—'You know the house

better than I do—perhaps you can tell me—"

'Better than you do! exclaimed Ada; "not much. I only got here last night at 11."

'Last night at eleven! receated Dr. Browne. 'Why, what a night of adventure you have had! No wonder you look worn out. Well, can you tell me who to send to, because there is evidently something very wrong here?

'Yes, I can tell you that, she answered. 'I have the address of Mrs. Mertoun's sister, who sent me down, and to whom I was to tolegraph if necessary. 'That is all right,' said Dr. Browne; 'have you ordered any breakfast?'

'Not yot,' she answered.

I will send the man to see that it is got ready for you, and brought to your room. Now go straight to bed.'

'Thank you, sir,' said Ada, 'but how can I leave

'Thank you, sir.' said Ada, 'but how can I leave

Mrs. Mertoun?

'I am not going away just yet: you know I did not travel from town yesterday. I will have her attended to: and you shall be called in four hours.'

'Thank you, sir,' said Ada again; and went away down the new sunlit staircase, on which her room

opened.

'Thank you, sir,' repeated Dr. Browne to himself. What an extraordinary little woman it is! And what eyes! By Jove, it has been a night of adven-

Ada got into bed, drank some warm coffee, and then fell suddenly into a deep, dreamless sleep. It was the repose of complete weariness. Four hours later the mud knocked at her door: Ada started up broad awage in an instant, and as fresh as a flower. In a very short time she was dressed and at the door of her patient's room. The maid was in charge: Dr. Browne had left her with instructions what to do, and Mrs. Mertoun seemed to be a little better. Agatha was lying on a heap of pillows, looking very white, and wild, and strange. But she was evidently in less suffering.

'My dear little nurse,' she whispered when Ada bent over her. 'I know you have saved my life. They will not tell me where my husband is, but you will. Is he mad!'

'I don't know anything,' said Ada. 'I have been asleep all this time.'

'He must be,' she went on. 'I am sure he was not in his right mind or he would never have attempted what he aid—you believe me, don't you? He loved me, when he was himself; but sometimes he had awfut fits of jealousy, when I have thought before now that he would try to kill me. It was in one of those fits that he brought me here; and it has been growing on him. When we were married I was thought a beauty; and he was always fanoying I should get tred of him. Oh, nurse, I am sure he was not in his right mind. You will tell the dector se, wou't you?'

'Yes, yes, I will,' said Ada, 'and indeed I think so: I should have said so in any case. And the servants told me this morning that he was not in his right mind.'

'Ah! then it will be all right,' said Agatha, with Ada got into bed, drank some warm coffee, and

then it will be all right,' said Agatha, a sigh of relief. Ada understood then that this beautiful woman still loved the husband who had attempted her life, and that her great dread was lest he should be held accountable for his attempted

Late that night Zee Conington arrived with her

crime.

Late that night Zoe Conington arrived with her husband; they brought with them a 'mental' attendant, who immediately took entire charge of Edward Mertoun. The dreadful thing which Ada had discovered and prevented was kept a secret among the few who knew of it.

Every day, after Zoe arrived, Agatha insisted that her dear little nurse, as she always called Ada, should go for a walk. The country around the Old Hall was exceedingly beautiful; to wander about in it was the keenest pleasure possible to the country-born girl. Zoe did all she could to make her happy; but she found that nothing pleased her so much as the fresh a rand the wild flowers. But Zee one day carried a great piece of gossip to her sister's sick-room.

'My dear,' she said 'I know now why Nurse Ada is so fond of the field. Dr. Browne meets her. They will be telling us they are engaged soon?

And so they did. One day they came in together with a conscious look of guilt. Dr. Browne says that when he asked Ada a question, which girls reply to generally in either a sentimental or a scoruful manner, Ada merely said,

'Thank you, sir,'—|The Whitchail Review.

cornful manner, Ada merely said,
'Thank you, sir.'-[The Whitehal] Review.

BEFORE AND AFTER.

" Did I step on your train ?"-

"Nay, degreest, no matter!"

"Nay, degreest, no matter!"

"My pet brown again—
D.d I step on the train I'

"You wanted, 'tis plain,
An excuse, sir, to flatter!"

"Did I step on your train I'

"Nay, my degreest! what matter I'' II.

"Your foot's on my gown"—
"Well, it doesn't much matter!"
"You Vandal! you clown!
Your foot's on my gown"—
"Such an ugly dull brown—
"Tisn't worth all this chatter!"
"Your foot's on my gown!"
"Well, what does it matter!"

THE DOG OF MONTARGIS.

Paris Letter to The London Globe.

A dog carved in the mantelpiece over the fireplace of the diming-room of the Château de Montargis is the only thing which remains to remind the present generation of the tamous duel which took place between the Chevalier de Maeaire and the faithful hound of Aubrey de Montdidier. The latter was murdered when out walking in the Forest of Bondy, where the chapel built by three merchants who were saved from the robbers by an apparition of the Virgin is still the site of an annual pilgrimage. His dog attempted to defend him, but was left for dead by the assailants. The animal recovered, and going to the house of a friend of its lass master, was successful in bringing him to the spot where the murderers had buried the body of their victim. No clew was found to the assassins until one day, when the friend was passing with the dog through the Rue and Ours, the animal flew at a man, who proved to be the Chevalier de Macaire. He would have been strangled had not some of the passers-by intervened. The matter was brought before King Charles V., who ordered the Chevalier and the dog into his presence. He considered that a combat was necessary, and gave permission for the trial by battle to take place. The Chevalier was to be armed with a club, and the dog was to have an empty cask to retreat to. The singular onel was take place behind the cathedral of Nôtre Dame, on the spot termed the Island of St. Louis, which now fronts the Morgue. It has been transformed into a garden, and those who sit down there after visiting the relies of Nôtre Dame, or before peeping into the Paris dead-house, little think that they are within the limits of the famous champ clos where the dog compelled the assassin of the public garden. Paris Letter to The London Globe. fess his crime.

Within a few hundred yards of the public garden is the Sorboune, famous for the experiments conducted there by M. Paul Bert and other viviscetion ists, who have never pansed to think of the agony they are inflicting on the animals who are not only the most faithful companions of man, but who can, according to history, enter the lists in who can, according to history, enter the lists in favor of those whom they regard as their natural protectors. The Rue aux Ours exists still, and bib-liophiles who study the history of old Paris, com-paring it with modern times, can point to the spot where the dog of Montargis first seized the assassin of Aubrey de Montdidier.

### THE THOUGHTS OF CHILDREN.

From The Pall Mall Gazette.

Alexander Dumas has been coming out in the character of censor morum, and the theme chosen in the paper which he has contributed to the periodical rejoicing in the title of Noureau Ne, is the familiar one of the neglect shown by prents in the training of their children, especially in very early years. The grand oftence of parents lies in shirking the difficulties presented by the curiosity of children. The first beginnings of that inquisitiveness are to be seen, according to M. Dumas, in actions not generally attributed to any such cause. "When you see a child spoil and destroy immediately and deliberately the playthings that have been given to it, pull off the petals of the flowers it has gathered, and even the wings of insects which it has caught, you say. 'Children are destructive; childhood is merciless.' It is a mistake. The child is not destructive; it is not cruel. It is curious It does not want to destroy, it wants to know." But with the very instance of this desire for knowledge, with the first utterance of the often embarrassing but inexoresisable questions "how?" and "why?" the gravest responsibilities fail upon the parent, and these responsibilities he either shirks or seeks to delegate to others. M. Dumas' description of the latter process is very forelible. The mother, who has married not knowing why, and brought forth a child not knowing how, makes haste to hand over the care of it to others. The wet-nurse and nurse to provide for the body; the bonne, the governess, and the convent, or, in the case of boys, the tutor and the school, to train the mind: the minister, the priest or the rabbi to look after the soul—each teaching something which the other calls false, and all this because this man and woman want to have all the pleasures, all the rights, all the recompenses, of parental duties is followed, in the case of the boys at least, by their absolute neglect. The young man's desire to know the world is allowed to lead him into all sorts of excesses, at which the par From The Pall Mall Gazette.

with grandchildren. Ar for the girl, she is kept as carefully away from all experience as the young man is recklessly exposed to all, and is allowed to grow up and her dreams and those of her equally ignorant companions, "until one day she meets, or is made to meet, a man more or less young, more or less intelligent, more or less rich, more or less intelligent, more or less rich, more or less distilusioned, whose character, antecedents, morals, relations and health are all imperfectly known, and whom she marries, because she is of the age to marry." If after this highly intelligent preparation of the young man or woman to meet the difficulties and temptations of life these difficulties and temptations prove too much for them, there is a great cry of injured surprise: "How does this come about? I have given him (or her) so much he child was well suckled by the nurse, well cared for by servants well taught by masters, wall grounded in morality by the priest. I cannot understand it at all."

All this is rather old wisdom, and more applicable replant to France than to England. But it

derstand it at all."
All this is rather old wisdom, and more applicable, perhaps, to France than to England. But it is always wholesome to be compelled to realize the full iniquity of customs in which habit causes us All this is rather old wisdom, and more applicable, perhaps, to France than to England. But it is aiways wholesome to be compelled to realize the full inquity of enstoms in which habit causes us to acquiesce without even being conscious of their defects. But when it comes to the remedy, M. Dumas, like all moralists, is less effective than in denouncing the evils. It is all very well to insist that paconts should from the first dawning of curiosity in their children, from the first "how "on" why?" prepare for the whole series of questions which are to tollow, and realize the inuceuse importance which attaches to their answers. The difficulty remains that, as has been well said, the stupidest child can ask more questions in five minutes than the wisest man can answer in a lifetime. The lesson of life, if it has a lesson, cannot be imparted. Each human being must learn it by his own experience. The problem in every case is how to give the child a provisional code to guide it will the experience is being gained, and to save it from tosing all that makes life worth having in the process of learning to live. And to the solution of that problem M. Dumas contributes very little. But there is one point on which he dwells, which moralists do well to insist upon. It is the helmonses of the time-honored practice of lying to children. That practice has indeed, as we all know, the highest philosophic authority. But the lies that Plato recommended were intended to embedy the truth. The lies that most men tell to escape the perplexity occasioned by children's questions are lies that not only do not embody the ruth, but render a true and healthy attitude of mind on certain subjects forever impossible. We are not now sreaking of disputed questions of faith, but of plain physical facts, of the habit of exciting an unnaural curiosity in children by evading their natural questions, of investing with a halo of unwholesome mystery matters for the most remarkable woman. Poth continues, "be children who, owing to physical causes, are i

EUGENIE'S LAST DAYS AS EMPRESS.

The events of the 14th served on the whole to give the Court too great a sense of security On the 17th the battles round Metz began, and Bagive the Court too great a sense of security Out the 17th the battles round Metz began, and Bazaine's armies, everywhere outnumbered and beaten, had to retreat before the German hosts. But St. Privat and Gravelotte were reported to the Paristans as victories, and it was said that Bazaine had thrown himself into Metz in order to take up a "strong position"! The Empress believed in all these faults. Was it a wonder that she should do so when at clubs like the Union and the Cercle Imperial, old generals would bark furiously at you if you expressed any doubt as to Marshal Caurobert's having driven a whole regiment of Prussian cultrassiers into the sand-pits of Janmout—sand-pits which had no existence? The truth is, double sets of telegrams used to be sent from the seat of war, and those which related events with some approach to the truth (for none of them were wholly truthful) were never commuteated to the Empress. When the hoaxing disparch about the Janmont sand-pits was put into her hands, the poor lady, believing in a real victory, was so overjoyed that she ran down from her apartments to the guard-room right among the soldiers, who were lying upon campbeds or playing cards, and waved the telegram, erving: "The Prussians are beaten!" She then eds or playing catds, and warrying: "The Prussians are b

a real victory, was so overjoyed that she ran down from her apartments to the guard-room right among the soldiers, who were lying upon campbeds or playing cards, and waved the telegram, eyng: "The Pressians are heaten!" She then suspended all her own personal preparations for hight. She said that if a revolution were attempted in Paris she would herself ride at the head of the troops that quelled it. This was her mood during several days, and it explains how so few of her own chattels were removed from the palace. Her wardrobe contained more than three hundred dresses; her collection of faas, of furs, of lace and linen was probably unique. For the pin-money which she had received in monthly payments ever since her marriage amounted to £45,000 a year, and one may add that she never failed to spend this sum to the last frane. Everything that the Empress possessed, with the exception of her jewels and a few valuable missals, was loft at the Tulleries when she flel; and the jewels would have been abandoned too, had not Mariame Carette, one of ner Majesty's ladies-invaiting, prevailed upon her after much pleading, to have these treasures confided to a banker.

The Empress led a curious life during her last, days on the throne. She was ap every morning at 7 o'clock, attired in a black cashmere dress which she wore all day with plain white collar and curs. At half past 7 she heard mass said in the private chapsel of the Tulleries by Mouseinneur Bauer, her almoner. Immediately after this she took a cup of chocolate with Madame Carette, who, by the by, was one of the most renowned Court beauties and a most charming companion, owing to her exquisitio cheerfulness. The Empress's private apartments were on the first floor of the Favillon de Flore overlooking the garden, and commanding a glorious view of the Seine and the Champs Elysies as far as the Triumphal Arch. The room in which she generally sat was a circular saloon, very gayly decorated with panels pasneed by Charles Chapliu, and illustrating the loves of a violet a lute the private dining-room, and swooped upon a cold luncheon that had been spread for the Em-

into the private dining-room, and swooped upon a cold luncheon that had been spread for the Empress.

On the 1st of September some servants of the Imperial household absconded, taking with them portable articles of value: statuettes of bronze and marble, miniature paintings, albums. Some of the Empress's dresses vanished. General Roland, the Governor of the patace, was at pains to secure proper attendance for the Regent; and going on a tour of inspection through the kitchens, he was stupefied to see workmen, soldiers and women—the friends of the scullions—being treated as hon-red guests in the servants' hall. The intruders were ejected pretty quickly by guards summoned for the purpose, but by this time it was known that the Emperor's struggle against the German armses was hopeless, and there was a general feeling abroad that before many days were over the Tuileries would be in possession of the mob. The only person who seemed to doubt this was the Empress herself. She still had her self-contained parcysms of terror about being murdered by an armed mob but she thought that the garrison of Pacis would make a resolute stand for the Imperial cause and keep the throne upstanding, though she herself might accidentally be put to death.